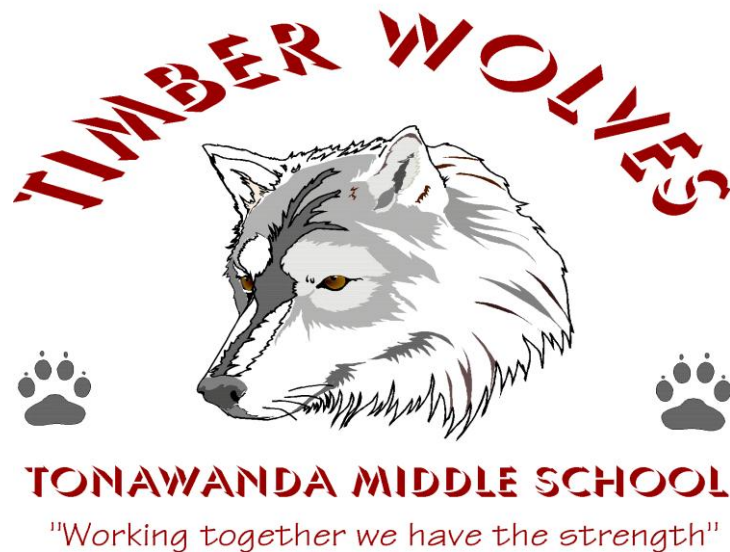


Curriculum Map

Grade 8 Technology



Shawn Lodovico- Team 8Y

Room 144 (Sept.- Jan.) & Room 142 (Jan. - June)

Curriculum Map
Grade 8 Technology Lab-Volt Lab

	September	October	November	December	January
Content	Safety Rules Measurement Tool Demonstrations Name Plates	Catapults Design & Problem Solving Vision Pro 7	AutoCAD Lt. Bridge Building	AutoCAD Lt. Bridge Building Christmas Projects	CO ₂ Dragsters Mid Term Review Mid Term Exam
Skills	<p>*Understand and apply the safety rules for an accident free work environment.</p> <p>*Have good knowledge of the English and Metric measurement systems.</p> <p>*Students will be able to operate equipment and various hand tools safely and properly.</p>	<p>*Ability to follow written and pictorial directions to complete the Catapult project using tools and machines.</p> <p>*Perform with accuracy various Technical Drawing exercises.</p> <p>-Lettering -Line Types -Dimensions -Orthographic Projection -Isometric Projection</p>	<p>*Ability to use the AutoCAD Lt. Drawing and design software.</p> <p>*Use of the West Point Bridge Design Program to generate designs for their bridges.</p> <p>*Science and Math skills</p> <p>-adding odd materials -efficiency and mechanical forces -geometrical shapes</p> <p>*Use of the AutoCAD Lt. program to draw the bridge plan.</p>	<p>*Ability to use the AutoCAD Lt. Drawing and design software.</p> <p>*Science and Math skills needed to build the structure.</p> <p>*Use of the AutoCAD Lt. program to draw the bridge plan.</p> <p>*Construction of the Bridge.</p> <p>*Designing and creating Christmas Gifts for family members.</p>	<p>*Use the internet and the Pitsco Dragster Design Software to design a CO₂ Dragster.</p> <p>-thumbnail sketches</p> <p>*Use AutoCAD Lt. to draw the dragster designs.</p> <p>Prototypes, models, and testing</p> <p>*Read and interpret a specifications handout.</p> <p>*Use the metric measurement system.</p> <p>*Use the tools and finishing techniques already learned.</p>
Assessments	Safety Quiz Nameplate Projects Measurement Quiz Tool Quiz-oral at specific machine.	Completed Catapult. Drawing Exercises Drawing Test	Complete AutoCAD Lt. drawing assignments. Finished bridges Destructive test of the bridge structure.	Complete AutoCAD Lt. drawing assignments. Finished bridges Destructive test of the bridge structure.	Check to see if the car is within the proper specifications. Time trials. How fast worksheet

Grade 8 Technology Lab-Volt Lab Curriculum Map

	Feburary	March	April	May	June
Content	Introduction to Technology Alternative Energy Rube Goldberg Project	Automation and Robotics Computer Graphic Design / Logo Design	Balloon Racers Vision Pro 7 Engravings Commercial Creation	Elopring Electricity Egg Drop Project Flight Simulation	Fiber Optics and Lasers Exam Review
Skills	* Definition of Technology - Seven resources -Technological Literacy -Impacts of Technology -Systems Design Process *Alternative forms of Energy. -Solar, wind, biomass, geothermal -Renewable and nonrenewable resources *Rube Goldberg Simple Machines Problem Solving Energy and Energy Transfer	*History of Robotics -Robotic systems -Programing the robotic arm through the teach pendant. -Automation -Running a programed course for the robotic arm. *Planning and design through the Canvas Design software to make a T-shirt. Creation of a logo Designing and Problem Solving	* Newton's 3 Laws of Motion * Vision Pro 7 Engraving Software * Desgin and Problem Solving * Microsoft Movie Maker *File Conversion Software * Advertising * Communication Technology	*Electricity -Conductors/insulators -Series/parallel circuits -Analog/digital meters -Safety * Gravity Design and problem Solving *Principles of Flight -Parts of an airplane -History of flight -Controls	*Fiber optics -Morse Code -Data/Voice Transmission -Science of light and optics -Lasers -Fiber Optics * Review Game for students *Review for State Technology Exam
Assesments	Various hands-on activities Lesson Quizzes Post Test Rube Goldberg Projects	Various hands-on activities Lesson Quizzes Post Test Student Created logo	Balloon Racer Engraved Project Student commercials	Various hands-on activities Lesson Quizzes Post Test	Various hands-on activities Lesson Quizzes Post Test